REMARKS

Claims 1-17 remain pending in this application, with Claims 1 and 8 being independent.

Applicants have amended Claims 3 and 10 to introduce more appropriate Markush language, and not for the purpose of further distinguishing the cited documents of record.

The Examiner has indicated that Claims 8-14 and 16 are allowed, for which Applicants extend their thanks.

However, Claims 1-7, 15 and 17 have been rejected. Applicants' thoughts on the merits of the rejection are discussed below.

Section 103 Rejections

More specifically, Claims 1-7, 15 and 17 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 4,214,066 (Moretto) in view Kirk-Othmer's Encycolopedia of Chemical Technology ("K-O") and Silicones: An Introduction to the Chemistry and Applications ("Silicones"). Reasons for this rejection are given at pages 2-5 of the Action.

Applicants traverse this rejection.

For the Examiner's review the invention defined by Claim 1 is directed to a silicone resin composition. This composition includes 100 wt parts of Component (a): an OH-containing polysiloxane; 0.1 to 200 wt parts of Component (b): a carbodiimide; and Component (c): an organosilicon crosslinking agent.

With the silicone resin compositions of the present invention, unlike those that have been developed in the past, curing inhibition does not occur under an oxygen atmosphere (such as is seen for peroxide curing), and no platinum catalyst is present (such as is seen for addition curing) to become poisoned when contacted with an amine and/or sulfur, leading to curing inhibition. The use of the inventive silicone resin composition leads to a cured silicone rubber exhibiting a higher elongation percentage in combination with improved physical properties in an operating automotive engine environment (such as heat resistance, oil resistance, water resistance and chemical resistance).

Against this invention has been cited three separate documents that have been combined to form the Section 103 rejection. Those documents are discussed in turn below.

The primary document, Moretto, is directed to compositions of polysiloxanes modified with polycarbodiimide.

In arriving at that which is disclosed therein, Moretto reads:

> [M]odified organopolysiloxane compositions which form by free radical polymerization of unsaturated organic monomers in organopolysiloxanes or by mixing corresponding constituents have been disclosed. The products which form are in some cases only compositions filled with organic polymer particles (for example a polyolefin or polystyrene) and in some cases also products in which the organic polymer is partially bonded to the siloxane by grafting. Compositions of this type and processes for their preparation are described, for example, in the Patent Specifications: U.S. Pat. No. 2,965,593 and U.S. Pat. No. 3,627,836.
>
> The properties of these last-mentioned products are, however, still unsatisfactory for a number of applications. The polymers which have been disclosed for filling or grafting are formed from one or more unsaturated monomers which are polymerizable, such as, for example, ethylene, vinyl chloride or 1,3-butadiene.
>
> These organic polymers as a rule have a low stability to high temperatures. They impart this adverse property to the cured organopolysiloxane compositions formed therefrom. In addition, they have adverse elastomer properties, such as, for example, high permanent set. Furthermore, they considerably impair the mechanical

> properties at elevated temperature (for example the tensile strength). The long term stability to heat, which otherwise is a distinguishing feature of the organopolysiloxanes, is lost.

These shortcomings -- such as low stability at high temperatures -- says Moretto are solved by "polysiloxanes modified with polycarbodiimide, which are characterized in that the polysiloxane and polycarbodiimide are present as discernible phases, in some cases with partial chemical and/or physical bonding to one another."

Claim 1 recites specific amounts of an OH-containing polysiloxane and a carbodiimide. Claim 1 also recites as a further component, an organosilicon crosslinking agent. Neither is believed to be disclosed by Moretto.

As regards the invention as so defined by Claim 1, it is this combination (not disclosed, taught or suggested by Moretto, with or without K-O or Silicones) that provides the benefits and advantages described in the application.

The Action acknowledges that "Moretto does not outline any specific embodiments of an alkoxysilicon compound." However, the Action determines that despite such deficiency in disclosure those persons of ordinary skill in the art would have been motivated to "turn to the related prior art, i.e those that

teach condensation-curable polysiloxane systems, to ascertain what materials might be used in this capacity."

So, not only is Moretto silent as regards the specific amounts of the OH-containing polysiloxane and carbodiimide, but it is also silent as regards an organosilicon crosslinking agent. And there is no suggestion to include such a crosslinking agent, let alone one for the purpose of achieving the results that Applicants have observed.

Despite these shortcomings of Moretto, the Action looks to the secondary documents -- K-O and Silicones -- that have been cited in support of the Section 103 rejection.

Applicants submit that their invention was discovered due to experience with technologies dissimilar from those disclosed by Moretto, and as such no motivation existed at the time the invention was made to look to K-O and/or Silicones to supply the missing pieces of the obviousness formula.

That is, in looking to preparing a silicone resin composition that when cured provides a product exhibiting a higher elongation percentage in combination with improved physical properties in an operating automotive engine environment (such as the combination of the following improved physical properties: heat resistance, oil resistance, water

resistance and chemical resistance), Applicants would have not been led to Moretto, and even if they had been so led, they would not have been motivated to move from Moretto to either of K-O and/or Silicones to reach their invention as claimed.

Applicants submit that the combination of the three cited documents could only have come about with a hindsight view toward the claimed invention. That is, Applicants submit that the determination that Claim 1 is obvious over the combination of the three cited documents of record used the recitations of the claim itself and parsed those cited documents for only so much of their respective disclosures to satisfy those claim recitations. Such an approach has long been forbidden in the examination of claims under examination.

Reconsideration and withdrawal of the Section 103 rejections are thus requested

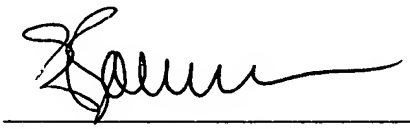
Priority Document

Applicants acknowledge the Examiner's comments regarding a certified copy of the Japanese priority application, and will attend to filing that document together with their next communication.

In view of the above, Applicants submit that all claims are allowable and request prompt passage to issue.

Applicants' undersigned attorney may be reached by telephone at (860) 571-5001 or by facsimile at (860) 571-5028. All correspondence should be directed to the address given below.

Respectfully submitted,



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